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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/106,519

06/29/1998

KEITH MCCLOGHRIE

CIS-044

6843

7590

05/06/2004

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EXAMINER

PHUNKULH, BOB A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/106,519

Applicant(s)

MCCLOGHRIE ET AL.

Examiner

Bob A. Phunkulh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5-7 and 9-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6,22-24,27 and 28 is/are allowed.
- 6) ☒ Claim(s) 7,10,25,26,29,31,43 and 44 is/are rejected.
- 7) ☒ Claim(s) 9,11-21,30 and 32-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This communication is in response to applicant's 03/03/2004 amendment/responses in the application of **McCLOGHRIE et al.** for "**SAMPLING PACKETS FOR NETWORK MONITORING**" filed 06/29/1998. The amendments/response to the claims have been entered. No claims have been canceled. No claims have been added. Claims 3, 5-7, 9-44 are now pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 10, 25-26, 29, 31 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal (US 5315580) in view of Lo (US 5,559,01).

Regarding claims 7, 10, 25-26, 29, 31, and 43-44, Phaal discloses a network monitoring device includes a receive means for detecting and receiving message packets carried on a network (an input port for receiving network packets), a sampling means for selecting a number of packets detected by the receive means (a sampling element for selecting a fraction of those packets for review), and a processing means for collecting and processing data from packets selected by the sampling means; wherein the sampling means select packets in a deterministic manner either on the

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basis of selecting every nth packet or on the basis of selecting the first packet detected after a fixed interval (see col. 1 lines 62 to col. 2 line 39).

In addition, Phaal discloses the size (threshold) of the receive and transmit FIFO buffers 25 and 26 can be quite small, for example sufficient to hold only two or three entries (see col. 5 line 66 to col. 6 line 12), and the collected packets sent out by the monitoring devices 12 over the network are all received by the measurement station 13 which stores these packets and carries out subsequent processing and analysis (see col. 6 line 27 to col. 7 line 37).

Furthermore, Phaal discloses the random selection of received packet header is based on the predetermined random counts stored in ROM 22 (see col. 4 lines 57-59). Also, the random numbers may be generated by the processor 21 (see col. 6 lines 30-43).

Phaal fails to disclose altering a fraction of packets for review that is response to a length of a queue of selected packets.

Lo, on the other hand, one implementation of the reset function in the preferred embodiment provides for changing the sampling intervals written into the sampling queue. In some instances, network traffic may be too light when compared to sampling intervals written into the sampling queue. In these instances, too few sampling packets will be processed. Therefore, the preferred embodiment provides for resetting the

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relatively large sampling intervals with smaller values by overflowing the sampling queue with the newer values. **When full, values written into the sampling queue replace existing values. By writing a sufficient number of new values, the actual number required depending upon *the size of the sampling queue* and values stored in the queue, new sampling intervals are established (see col. 5 line 56 to col. 6 lines 3).**

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to replace the receive and transmit FIFO buffers 25 and 26 of Phaal with the queue 110 and queue control 112 of Lo in order to provides the queue system with ability to monitor the length of queue when storing the sampled packets -thus avoid overloading the traffic sampling element by stopping or decreasing the sampling rate.

Allowable Subject Matter

Claims 3-6, 22-24, and 27-28 are allowed.

Claims 9, 11-21, 30, 32-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

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Applicant's arguments filed 3/03/2004 have been fully considered but they are not persuasive.

In response to the Applicant's arguments in pages 2-3:

1. The rejected claims does not have "a feedback element" feature in the rejected claims. Also, the Phaal discloses the network interface 20 is operative to carry out all the low level functions necessary to interface the monitoring device of FIG. 3 to the network cable 10 and to pass received packets to a receive queue, in the form of a FIFO (First In First Out) buffer 25 in RAM 23 (see col. 4 lines 11-14).

2. Claim 7 clearly cited "altering said faction in response to a length of said queue." Lo discloses this feature in col. 5 lines 57 to col. 6 line 3, which cited the following:

One implementation of the reset function in the preferred embodiment provides for changing the sampling intervals written into the sampling queue. In some instances, network traffic may be too light when compared to sampling intervals written into the sampling queue. In these instances, too few sampling packets will be processed. Therefore, the preferred embodiment provides for resetting the relatively large sampling intervals with smaller values by overflowing the sampling queue with the newer values. **When full, values written into the sampling queue replace existing values. By writing a sufficient number of new values, the actual number required depending upon the size of the sampling queue and values stored in the queue, new sampling intervals are established (see col. 5 line 56 to col. 6 lines 3).**

Therefore, Lo discloses altering a fraction of packets for review that is response to a length of a queue of selected packets.

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Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703**. The fax phone number for this group is **(703) 872-9314**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh



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May 4, 2004